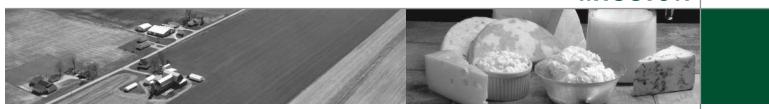
NORTH DAKOTA AGRICULTURAL PRODUCTS UTILIZATION COMMISSION

Supporting the Dawn of a New Age in Agriculture



MISSION



The mission of the **Agricultural Products Utilization Commission** is to create new wealth and jobs through the development of new and expanded uses of North Dakota agricultural products.

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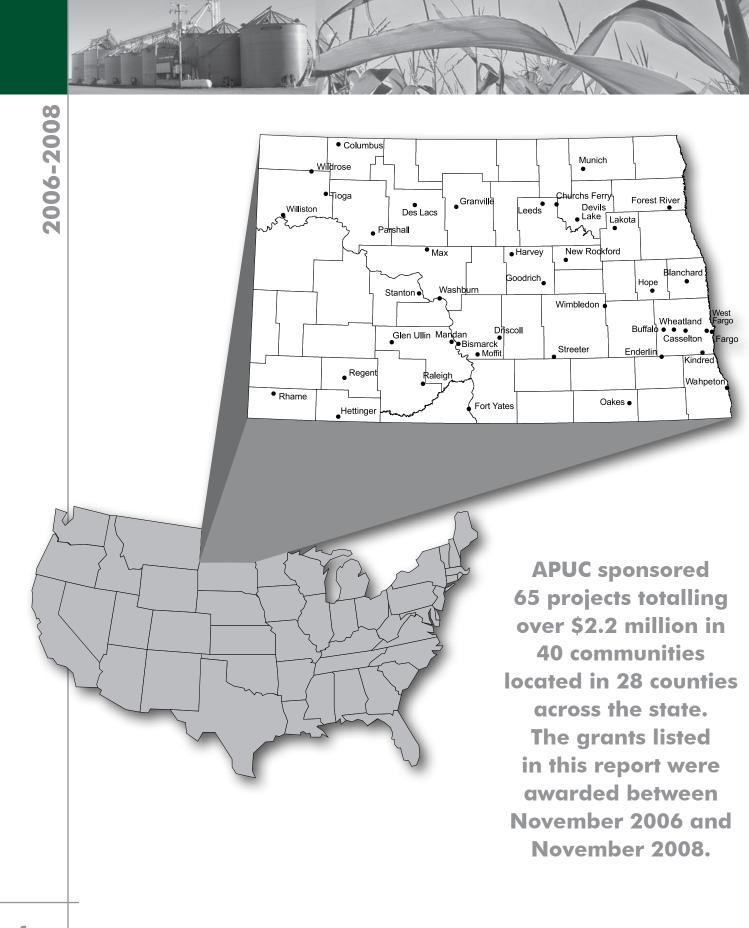


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LOCATIONS OF APUC-SPONSORED PROJECTS



ADMINISTRATION



The North Dakota Agricultural Products Utilization Commission (APUC) consists of nine members. The governor appoints five of the members to two-year terms each, arranged so that two terms expire in odd-numbered years and three in even-numbered years. Three of these appointees must be actively engaged in farming and two must be actively engaged in business. The Commissioner of Agriculture appoints one member to a two-year term that expires in odd-numbered years, and this member must also be actively involved in farming. All terms begin July 1.

The board also includes three statutory members or their designees: Paul Lucy, director of Economic Development and Finance, a division of the Department of Commerce, Joseph Chapman, president of North Dakota State University, and Commissioner of Agriculture Roger Johnson.

Dan Kalil, a farmer from Williston and Gov. Schafer's appointee, has served as the Commission's chairman since July 2001.

Executive Director John F. Schneider and Administrative Assistant Inez Ryberg are responsible for administering APUC's programs and overseeing the daily operations of the Commission.

APUC is an office within Economic Development and Finance, a division of the North Dakota Department of Commerce.

APUC COMMISSIONERS



Dan Kalil, Chairman Governor's Appointee



Bruce Anderson, Vice Chair Agriculture Commissioner's Appointee



Bill Kingsbury Governor's Appointee



Paul LucyEconomic Development
and Finance Representative



Bruce McLeanGovernor's Appointee



Myron Thompson Governor's Appointee



Theresa Tokach Governor's Appointee



Jim Venette NDSU representative



Jeff WeispfenningAgriculture
Commissioner's Designee

APUC STAFF



John F. Schneider Executive Director



Inez Ryberg Administrative Assistant

BASIC & APPLIED RESEARCH GRANTS



A Basic & Applied Research Grant helps fund research for processing agricultural products and byproducts in North Dakota. This grant cannot be aimed at business expansion or creation without regard to agricultural products, must not include research that cannot reasonably be expected to result in a marketable product, or cannot have been duplicated by other research efforts. Grants are listed in order of distribution.

NDSU Corn Study for Ethanol

Dr. Marcelo Carena, Fargo NDSU Dept. of Plant Science

Grant Amount: \$ 25,000.00 Total Budget: \$112,508.00

This project involves research for screening and identification of early-maturing ethanol-specific corn varieties targeted at improving the economics and efficiency of ethanol production. Corn hybrids will be utilized by the ethanol industry only if research for abiotic stresses such as drought, cold and salt tolerance with nitrogen use efficiency and other agronomic traits are addressed.

North Dakota Corn Utilization Council

Jocie Iszler, Fargo

Grant Amount: \$ 20,000.00 Total Budget: \$303,619.00

The Energy & Environmental Research Center at UND will research and develop an electrochemical process that utilizes ethanol co-product carbon dioxide to make urea fertilizer. This would result in lower cost for domestically produced fertilizer and promote rural economic development through establishment of fertilizer production facilities.

NDSU Field Peas as Ethanol Feedstock

Dr. Cole Gustafson, Fargo NDSU Dept. of Agribusiness & Applied Economics

Grant Amount: \$ 42,420.00 Total Budget: \$ 59,140.00

This study is to determine the economic feasibility of using field peas as an ethanol feedstock in North Dakota. Results indicate plant efficiency increases, the value of co-products (DDGs) increases, and input supply risks are reduced when field peas replace corn.

NSB Valhalla

Scott Sjol, Des Lacs

Grant Amount: \$ 53,500.00 Total Budget: \$105,000.00

NSB Valhalla is refining the technology and manufacturing process for flax straw, an agricultural-based waste byproduct, for utilization as a commercially viable pellet-based heating source for use in residential, commercial and agricultural applications.

Oakes Bio-Energy Park

Charlie Kraemer, Oakes

Grant Amount: \$ 61,000.00 Total Budget: \$ 121,000.00

Oakes Enhancement Inc. and Great River Energy, among other partners, are performing a site design study to locate a bio-energy industrial park in the Dickery-LaMoure Counties area. The industrial park would integrate multiple facilities such as biodiesel, ethanol and other agriculture processing with a combined heat and power plant.

NDSU Vineyards

Harlene Hatterman-Valenti NDSU Dept. of Plant Science

Grant Amount: \$ 25,156.00 Total Budget: \$ 45,156.00

This research will compare crop performance and fruit quality of 16 grape cultivars at three NDSU locations. Both juice and wine cultivars are included. Vine data will be collected on winter hardiness, biomass and health. Grapes will undergo wine quality chemistry analysis and additional tests that will determine phytochemical concentrations for insight into the human nutrition value of locally grown grapes.

NDSU Department of Plant Science North Dakota Grape Growers Association

Harlene Hatterman-Valenti, Fargo

Grant Amount: \$100,000.00 Total Budget: \$450,000.00

NDSU and the North Dakota Grape Growers Association are working in a joint effort to research vineyards that were established in 2004 and 2006 to compare crop performance and fruit quality of 16 grape cultivars at three NDSU Agriculture Experiment Stations. Both juice and wine cultivars have been included in this experiment. Vine data will be measured and the grapes will undergo chemistry analysis for winemaking. Additional tests on the fruit will determine phytochemical concentrations, offering greater insights into the human nutrition benefits from locally grown grapes.

BASIC & APPLIED RESEARCH GRANTS

NDSU Nanocomposite Biomaterials Industry in North Dakota

Dr. Larry Leistritz Dept. of Agribusiness & Applied Economics

Grant Amount: \$ 26,500.00 Total Budget: \$1,500,000.00

This is Phase II of a project to use cellulose nanofibers derived from wheat straw to make a product that would substitute for fiberglass and plastics in many applications, including automotive parts. The technology will be integrated as part of a multi-product bio-refinery, which will produce ethanol and electricity as well as cellulose nanofibers for the nanocomposite material.

West Dakota Feed & Seed

Kevin Kvamme, Ross

Grant Amount: \$ 36,500.00 Total Budget: \$459,800.00

The purpose of this project is to continue to increase the market for field peas and field peas value-added products. West Dakota Feed & Seed is working with Northern Crops Institute to develop individual fractioned products.

Refrigerated Dough from Hard Red Spring Wheat

Dr. Senay Simsek NDSU Dept. of Plant Science

Grant Amount: \$ 7,500.00 Total Budget: \$ 20,000.00

Refrigerated dough is more than a half-billion dollar industry in the U.S. Currently, hard red spring wheat is not used because of "dough syruping problem." This research will investigate the potential of using hard red spring wheat for refrigerated dough production based on cultivarenvironment effect. The main objective is to expand end-use markets for North Dakota producers.

Biofuel Feedstock in Central and Western North Dakota

Paul Nyren, Streeter and NDSU Central Grassland REC

Grant Amount: \$ 40,000.00 Total Budget: \$723,745.00

NDSU, in partnership with the North Dakota Natural Resources Trust, started a 10-year dedicated bio-energy crop study to determine the appropriate grass species, harvest method and management practices to maintain productive stands. These perennial grass feedstocks could potentially be grown on land not well suited for annual crops. The economics for production of a bio-energy crop will be evaluated, as well as the impact on soil organic matter and carbon storage. This research project will develop beyond its current funding capabilities and expand it to include in-depth economic evaluation and forage chemical analysis of the species for use in bio-refineries.



NSB Valhalla

Developing Flax Straw Heating Pellet Technology

NSB Valhalla is refining the technology and manufacturing process for flax straw, an agricultural-based waste byproduct, for utilization as a commercially viable pellet-based heating source for use in residential, commercial and agricultural applications.

The Des Lacs company received an APUC basic and applied research grant for \$53,500 to pursue the endeavor.

Over the course of 2007, the company obtained and assembled industrial equipment capable of processing and extruding the finished flax straw heating pellet product.

The technology to accomplish had not existed prior to NSB Vallhalla's efforts. The company's equipment is currently under a provisional U.S. patent, which is in the process of converting into a formal patent.

The finished flax straw extruded pellet or cube heating product is a dense, firm alternative heating fuel product, intended for use in home heating pellet stove, pellet boiler, pellet furnace, commercial stoker boiler or commercial stoker furnace heating systems. Preliminary product testing indicates the initial product appears comparable with currently marketed hardwood sawdust heating pellets.

The product can be bagged for retail sales or sold bulk to larger commercial customers.

The newer residential and commercial pellet heating equipment technology systems on the horizon reinforce the commercial viability of the flax straw heating pellet technology.

Drought Corn Study for Ethanol Utilization

Dr. Marcelo Carena NDSU Dept. of Plant Science

Grant Amount: \$ 75,000.00 Total Budget: \$151,652.00

This study is to obtain elite drought tolerance, high starch and early maturing corn hybrids at no expense to grain yield potential that are specific to North Dakota ethanol producer areas where the seed industry is not actively present. The results of this study would significantly enhance our ability to improve corn in the next decades by increasing the availability of quality food, feed and fuel as well as better corn ethanol relationships.

BASIC & APPLIED RESEARCH GRANTS

ComPAKco

Norm Miller, Fargo

Grant Amount: \$ 26,000.00 Total Budget: \$ 55,000.00

The company is building the JMF200 ComPAKer for agricultural applications. It will have the ability to blend additives as needed, so farmers can ComPAK grasses, etc., for feed or to use as fuel. The PAK's increase digestibility and nutrients absorbed by livestock. Funds will be used for further research and design to make it practical for use.

Effects of Fibers on Frozen Dough

Clifford Hall III

NDSU Dept. of Cereal & Food Sciences

Grant Total: \$ 25,000.00 Total Budget: \$ 34,000.00

This project will evaluate the effects of fibers from flaxseed, peas, soybean and oats on frozen dough stability and baked breads quality over a 20-30 week frozen storage. This research will identify the fiber or fibers that perform best in frozen dough and the prevention of dough breakdown during the frozen storage. Upon completion of the project, SunOpta will commercialize the fiber for application in frozen dough.

MARKETING & UTILIZATION GRANTS



A Marketing & Utilization Grant is to be used for the development or implementation of a sound marketing plan for North Dakota agricultural products and byproducts. Monies from this grant may be used for the purpose of marketing a product or to formulate or implement a marketing plan by individuals, a group of individuals or an individual on behalf of a group to organize a cooperative. Grants are listed in order of distribution.

Feedlots of the Future

Washburn Area EDA

Grant Amount: \$ 41,250.00 Total Budget \$ 79,250.00

This grant will help fund a feasibility analysis for a cattle feedlot and anaerobic digestion biogas facility co-located with Blue Flint Ethanol Plant.

Yellowstone Ethanol Plant

Bob Gannaway, Williston

Grant Amount: \$ 176,000.00 Total Budget: \$130,000,000.00

The Yellowstone Ethanol Plant, powered by North Dakota and Montana lignite, will convert grains (corn, barley and wheat) to ethanol and distilled grains. Ethanol sales will be targeted to West Coast markets and distilled grains to markets in North Dakota, Montana and neighboring states. Preliminary design is under way and process equipment specifications are nearly completed.

North Dakota Branded Beef Packing

Alvin & Juanita Braun, Harvey

Grant Amount: \$ 46,750.00 Total Budget: \$ 98,350.00

The Brauns purchased the beef processing plant in Harvey and plan to market the company to prospective customers through trade shows, advertising and other marketing activities. The grant will also be used to develop a comprehensive integrated system for source verification.

BTR Farmers Co-op

Doug Dulmage, Leeds

Grant Amount: \$ 6,693.00 Total Budget: \$ 51,250.00

This grant will be used to study the economic feasibility of (1) selling the vegetable oil and byproducts produced in a small-scale oil seed crushing facility, and (2) the potential direct conversion of the vegetable oil into bio-diesel and marketing it and its byproducts.

Myers Meats

Calvin Myers, Parshall

Grant Amount: \$ 23,000.00 Total budget: \$ 66,450.00

Myers Meats has developed a "pulled pork" product that is ready for commercialization. The purpose of this project is to make final adjustments in product development, create packaging and label materials and develop a comprehensive marketing plan to ensure success of the commercialization process.

Maple Valley Locker, Inc.

Kevin Hartl, Enderlin

Grant Amount: \$ 5,513.00 Total Budget: \$ 30,000.00

This grant will be used for marketing plan implementation. Plans are to update computers as well as expand the website and overall advertising to educate consumers about identity-preserved, source-verified locally raised and/or fed livestock. This effort will focus on the "farm to fork" connection.

In the Potter's Hands

Gerald & Christine Gillund, Wildrose

Grant Amount: \$ 18,900.00 Total Budget: \$101,470.00

The company will introduce and secure markets for a new line of natural specialty skin care and spa products. The Millennial Essential product line would reflect the high quality of products that would appeal to new markets in the East and West Coast metropolitan areas.

Flax USA

Jared Stober, Goodrich

Grant Amount: \$ 77,500.00 Total Budget: \$ 207,500.00

Flax USA is a fifth generation family farm business that is expanding its marketing on a national scale by developing new products and innovative competitive advantages. They have incorporated a proprietary True Cold Milled process to extend the shelf life of their flaxseed products.

North Dakota Dairy Coalition

Gary Hoffman, Mandan

Grant Amount: \$ 66,000.00 Total Budget: \$ 142,835.00

Phase III of the North Dakota Dairy Coalition's goal is to increase the number of dairy cows in the state by working with producers who want to update or expand and recruiting dairy producers from other areas. An increase in the number of dairy cows will stabilize and enhance an industry that benefits rural North Dakota.

North Dakota Sow Center, LLLP

Craig Jarolimek, Forest River

Grant Amount: \$ 35,000.00 Total Budget: \$34,000,000.00

The company plans to build a 5,000-head sow unit. The unit will contain breeding, gestation and farrowing buildings along with an office and shower facilities. The unit will produce high quality piglets to be sold to pig producers under contractual arrangements.

Pugsley's Premium

Gary Senger, Devils Lake

Grant Amount: \$ 14,443.00 Total Budget: \$137,703.00

Pugsley's has developed 17 "Coffee House Gourmet Sandwiches" specifically for the specialty coffee industry. Marketing plans are to introduce the sandwiches through press releases and ads in trade publications, attendance at coffeehouse trade shows, direct mailings and increased marketing materials.

Northern Prairie EnviroFuels

Bryan Anderson, Munich

Grant Amount: \$ 54,000.00 Total Budget: \$ 91,000.00

A feasibility study on the economic viability of a large-scale oil seed crushing plant and a vegetable oil conversion to biodiesel facility showed potential for a plant. The grant will fund creation of a business plan.

S.F. Industries

Alan Juliuson, Hope

Grant Amount: \$ 56,585.00 Total Budget: \$ 186,200.00

S.F. Industries has developed a new product, Full ChargeTM SuperchargedTM Sunflower Seeds, the world's first fortified, high-energy sunflower seed product. Plans are to market the new product nationwide.

WADF 03

Larry Dewhirst, Williston

Grant Amount: \$ 101,000.00 Total Budget: \$ 150,000.00

This is the second phase of a site analysis to host a frozen potato processing plant. This analysis will determine the exact site for the processing plant and will consist of water in/out, soil bearing costs, best energy options and ingress/egress issues.

Glovich Hunting Lodge

Sandy Glovich, Moffit

Grant Amount: \$ 3,050.00 Total Budget: \$ 5,250.00

Website design is needed for a hunting and bird watching lodge that is rich with birds and wildlife.

Tharaldson Ethanol Plant

Russ Newman, Casselton

Grant Amount: \$101,000.00 Total Budget: \$321,625.00

The company is in the process of developing a 100-million-gallon per year ethanol plant located west of Casselton. The plant is expected to produce the ethanol using approximately 36 million bushels of corn per year.

US Omega3 Foods

Robert Oberlander, Wheatland

Grant Amount: \$ 26,000.00 Total Budget: \$373,833.00

A new company will launch a progressive in-state and regional multimedia marketing campaign introducing a new line of value-added products made from flax and produced in North Dakota. US Omega3 Foods will do in-store promotions, consumer education, web site creation and attend national trade shows.



Flax USA

Successfully Launching Product

Flax USA's specialty is developing and distributing flax seed products to be used as health food in consumers' daily diets. The Goodrich company secured and continued to develop their retail presence by adding key stores such as Sam's Club, Costco, Supervalu and many others to gain national and international exposure.

In April 2007, Flax USA was awarded a \$77,500 APUC marketing and utilization grant. Just over a year later, the company had grown its business over 650 percent and became a multi-million dollar business with the help from APUC funds. The company has also created a demand for North Dakota-grown flaxseed, which in turn created new jobs in the state.

The majority of APUC funding was used towards in-store demos for Costco Wholesale and Sam's Club, resulting in a huge success. Funding was also used for slotting fees, trade shows and marketing materials to grow the business. Flax USA, a fifth generation family farm business, established new national markets and also entered the international field.

Awareness for the benefits of flax is at an all time high and continues to increase every year, ensuring a strong demand for North Dakota-grown flax seed and continued success for Flax USA. This strong consumer awareness and the help from APUC funding have been key in the successful product launch for the company.

Northern Food Grade Soybeans

Susan Geib, Fargo North Dakota Trade Office

Grant Amount: \$ 13,000.00 Total Budget: \$ 39,000.00

The North Dakota Trade Office/Northern Food Grade Soybean Association, in conjunction with major food grade soybean growers in North Dakota and American Soybean Association of Singapore, plan to bring 10 qualified soybean buyers to the state to attend seminars relating to the quality of North Dakota agriculture, tour soybean farms and further cement important ties to this all-important Asian market.

GIANTS Snacks

Jay Schuler, Wahpeton

Grant Amount: \$ 60,000.00 Total Budget: \$616,000.00

This grant will be used to expand marketing of GIANTS brand sunflower seeds from 25 states to over 40 states. This will also help the identity preserve program with the state's farmers, which ensures the company's products are grown on North Dakota farms at a premium price.

Renewable Commodities

Dale Beck, Kindred

Grant Amount: \$ 41,000.00 Total Budget: \$120,000.00

The company will conduct a feasibility study, prepare a marketing and business plan and complete preliminary engineering work for a 21,000-bushel, 30-million-gallon soybean crushing facility and refinery.

S & E Meats

Kathy Kunkel, Granville

Grant Amount: \$ 12,600.00 Total Budget: \$ 36,000.00

S & E Meats is creating a specialty pizza incorporating North Dakota buffalo meat rather then beef as a topping. The pizza will be marketed in north central North Dakota as well as Colorado and Florida. This project will create jobs in rural McHenry County.

North Dakota Branded Beef, Inc.

Juanita Braun, Bismarck

Grant Amount: \$ 36,530.00 Total Budget: \$ 95,265.00

This project is for the North Dakota Branded Beef store in Bismarck. The grant will be used to research and develop additional processed meat products utilizing the middle meats and trim, promote sales of gift package combinations locally and regionally and provide a strong centralized retail location for a growing number of products by expanding and improving the current retail space.

MAP 2008

ND Department of Agriculture, Bismarck

Grant Amount: \$ 15,000.00 Total Budget: \$ 60,000.00

This grant will defray a portion of the costs of North Dakota agriculture companies to travel to national and international tradeshows and trade missions. It will also assist the Market Builder Program in providing customized in-market research to companies. The grant will help fund the cost of Export Essentials Online, which helps U.S. food companies understand the complex steps of exporting.

Foursquare Feeders, LLLP

Wayne Buchholz, Rhame

Grant Amount: \$ 10,000.00 Total Budget: \$ 50,000.00

This study will assess the economies and technical feasibility of establishing a bison and beef cattle feedlot in the state that could potentially market bison and natural beef. It will also investigate the opportunity to purchase an existing site or develop a new greenfield site.

Standing Rock Equine Center

Joe Dunn, Fort Yates

Grant Amount: \$ 12,337.50 Total Budget: \$ 30,000.00

Plans are to conduct a feasibility study on an indoor horse arena for use by professional horse trainers, a college horsemanship instruction program, horse therapy, rodeos and horse shows, 4-H clubs and other youth organizations.

Lakota BioFuels, LLC

Bruce Anderson, Lakota

Grant Amount: \$ 50,000.00 Total Budget: \$ 171,000,000.00

Lakota BioFuels is a proposed 55-million-gallon per year ethanol plant to be located near Lakota. The plant, estimated to cost \$171 million, will employ 38 to 40 people.

Buffalo Creek Energy, LLC

Glenn Giese, Hettinger

Grant Amount: \$ 50,000.00 Total Budget: \$2,207,500.00

This proposed 55-million-gallon per year ethanol plant will be located near Gascoyne. The plant is estimated to cost \$190 million and will employ 39 to 40 people in southwestern North Dakota.

Rough Riders Renewable Fuels

Liz Larkin, Washburn

Grant Amount: \$ 31,000.00 Total Budget: \$150,000.00

Rough Riders Renewable Fuels is a proposed multiple feedstock biodiesel plant in Mercer or McLean County. Plans are to do a site selection process, feasibility study and business plan.

Evergreen Dairy & Energy

Shaun Beauclair, Fargo

Grant Amount: \$ 31,000.00 Total Budget: \$1,000,000.00

This company is comprised of three integrated green renewable businesses: a 10-million-gallon ethanol plant, a 5-million-gallon anaerobic digester and a 12,000-head dairy. Combing these green agribusinesses maximizes the value of the products and byproducts and minimizes the environmental impact in addition to increasing profitability. Funds will be used for legal fees and accounting.

Catherine's For Lamb

Kate Pfenning, Driscoll

Grant Amount: \$ 38,000.00 Total Budget: \$155,270.00

Catherine's for Lamb is a family-operated farm-torestaurant/retail business. Pfenning, a native New Zealander, has an extensive knowledge of lamb production and marketing. She has selected Katahdin Hair Sheep, which are a meat breed only and known for low fat and exceptionally mild and flavorful taste.

Maple River Winery

Greg Kempel, Casselton

Grant Amount: \$ 8,925.00 Total Budget: \$ 45,000.00

This grant will be used to market and promote wines produced in and made with fruit grown in North Dakota. Plans are to market the wine in Minnesota through a distributor as well as to 30 states via the internet.

North Dakota Dairy Coalition

Gary Hoffman, Mandan

Grant Amount: \$ 66,000.00 Total Budget: \$142,835.00

Phase IV of the Coalition's goal is to increase the number of dairy cows in the state. An increase in the number of dairy cows will stabilize and enhance an industry that is good for rural North Dakota. Hoffman will work with state producers who want to update or expand their operation as well as recruit dairy producers from other areas who are considering relocating their dairies.

Red Trail Vineyard

Rodney & Steve Hogen, Buffalo

Grant Amount: \$ 13,125.00 Total Budget: \$ 47,479.00

Red Trail Vineyard, one of North Dakota's premier vineyards, will be sponsoring tours for all interested in viticulture (the process of growing grapes) for the production of wine. Individuals can participate in educational and relaxation tours and taste wines from North Dakota and the surrounding areas. Groups of up to 16 can reserve the tasting room at Red Trail for private gatherings and celebrations. The 3rd Annual Wine & Grape Harvest Festival and Grape Stomp was held in August.

Lifeline Farms

Craig Jarolimek, Forest River

Grant Amount: \$ 46,000.00 Total Budget: \$6,500,000.00

Lifeline Farms will produce 30-pound high-health pigs for use by Excorp Medical in their development of a medical system that will sustain patients critically ill with acute liver disease or liver failure. Livers harvested from donor pigs will be processed and used in a replaceable bioreactor cartridge as part of the medical system developed by Excorp Medical. Heart valves, skin and corneas will be harvested as Excorp Medical develops markets for these organs. Excess pigs will be sold commercially or into a niche market requiring antibiotic-free management practices.

Ag Plus Cooperative, Inc.

Dale Beck, Kindred

Grant Amount: \$ 51,000.00 Total Budget: \$250,000.00

This project is the development phase of a 42-million-bushel soybean crushing facility in southeast North Dakota. The facility would create 65 to 80 jobs and have an annual direct impact of \$45 million.

Dakota Prairie Organic Flour Mill

Eric Hoberg, Harvey

Grant Amount: \$ 51,000.00 Total Budget: \$196,250.00

Dakota Prairie Organic has added a gluten-free facility within its building and is requesting assistance to market the products on a worldwide basis. There is increased awareness of allergies such as celiac disease, and the mill is seeking ways to differentiate themselves from the larger players of the gluten-free flour industry.

West Dakota Feed & Seed, LLC

Kevin Kvamme, Ross

Grant Amount: \$ 37,500.00 Total Budget: \$1,110,500.00

West Dakota Feed & Seed processes regular green or yellow peas through a wet fractionation that will create a pea protein concentrate that is 50 percent protein and a pea starch concentrate that is 99 percent starch. These products will be suitable to be used in the food industry. Plans are to attend trade shows throughout the United States, Germany and China.

FARM DIVERSIFICATION GRANTS



The Farm Diversification Grant category gives priority to projects dealing with the diversification of a family farm to non-traditional crops, livestock, or on-farm, value-added processing of agricultural commodities. Traditional crops and livestock are generally defined as those on which the North Dakota Agricultural Statistics Service maintains statistics. The project must have the potential to create additional income for the farm unit. Grants are listed in order of distribution.

McLean Organic Rhubarb

Tim & Kari McLean, Wheatland

Grant Amount: \$ 5,250.00 Total Budget: \$ 14,100.00

The project will diversify a 1500-acre farm by establishing and maintaining a two-thirds acre plot of organic rhubarb holding about 600 plants. The second year should produce 3000 to 3500 pounds of rhubarb. An agreement has been made with Maple River Winery, Casselton, to buy the rhubarb for use in North Dakota wine production.

Twisted Sisters Vineyard

Val Anderson & Cheryl Elliott, Blanchard

Grant Amount: \$ 5,250.00 Total Budget: \$ 11,465.00

Twisted Sisters will plant 500 grapevines for a vineyard that will produce grapes for North Dakota wineries. Table grapes will also be grown to make jelly and grape juice. Plans are to open the vineyard for public tours.

Duppong Vines & Vineyard

Ken & Mary Ann Duppong, Glen Ullin

Grant Amount: \$ 10,500.00 Total Budget: \$ 38,618.00

The Duppongs will expand their vineyard to three acres, using grape varieties that will survive the North Dakota climate. They are exploring the feasibility of starting a nursery and doing retail sales of grapevines. Plans are to hold on-site educational experiences for various adult groups and school children and become a learning-based vacation site affiliated with North Dakota Agri-tourism. Future plans are to become qualified to host workshops and provide lectures on grape growing.

Antelope Hill Lodging & Recreation

Diane Bachmeier, Raleigh

Grant Amount: \$ 5,250.00 Total Budget: \$ 30,000.00

This family owned and operated recreation facility promotes the family farm and the great outdoors. The lodge provides sleeping accommodations, home cooking, inexpensive family recreation, paid pheasant hunts and country living. Its many recreational opportunities make it an ideal location for family reunions.

FARM DIVERSIFICATION GRANTS

Bethany Prairie Farm

Linda Grotberg, Wimbledon

Grant Amount: \$ 5,250.00 Total Budget: \$ 55,650.00

This small-scale renewable energy project involves the growing and on-farm custom pressing of oil crops for the production of oil and cake. The oil will be used for powering diesel engines and heating systems. The cake will be used as a protein supplement for livestock. This will make the farm more sustainable and less dependent on outside resources.

Kouba Pines Ranch

Brian Kouba, Regent

Grant Amount: \$ 5,250.00 Total Budget: \$ 40,250.00

Kouba Pines Ranch, a fee hunting business, is expanding to become a hunting lodge offering sleeping accommodations, housing for hunting dogs and bird cleaning facilities. The family has planted food plots and dug several wells to attract and keep the pheasants on their land.



Central North Dakota Pastured Poultry Institute

Promoting Farm Sustainability

Central North Dakota Pastured Poultry Institute (CNDPPI) is a group of Wimbledon area farmers working together to teach and train others to raise pastured poultry. Pastured poultry is a means for farm families, retirees, homesteaders and hobby farmers to provide and improve food security, increase and maintain farm sustainability, and also increase sustainability of rural communities.

The group, with the leadership of Dick and Linda Grotberg, developed CNDPPI as an institute to provide the necessary tools for production of pastured poultry, including building pasture pens, caring for poultry, providing organic feed and rations and processing birds. They also maintain a feed center to grind a complete organic ration and make it available to be bagged and purchased by individual producers.

CNDPPI, located on the Grotberg's Bethany Prairie Farm, received a \$5,000 APUC farm diversification grant in 2006. The funds from this grant were used to move four granaries which comprise the feed center to the farm and make improvements necessary for use by the Institute.

NATURE-BASED AGRI-TOURISM



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Nature-Based Agri-Tourism grants seek to attract visitors to a working farm or ranch, or any agricultural, horticultural or agribusiness operation to enjoy, be educated or be involved in activities. Eligible projects include, but are not limited to, farm or ranch tours, hands-on chores, self-harvesting of produce, hunting operations, fishing operations located on applicant's land, bird watching, trail rides and corn mazes.

Red Trail Grape Stomp

Steve & Rodney Hogan, Buffalo

Grant Amount: \$ 10,500.00 Total Budget: \$ 50,750.00

Red Trail Vineyard will sponsor tours for those interested in viticulture (the process of growing grapes). In addition to touring the vineyard, participants will learn about the history of the area and vineyard as well as the process of starting and maintaining a cold-climate grape vineyard. The grant will be used for advertising and promotions.

PROTOTYPE & TECHNOLOGY GRANTS



APUC provides grants in two areas of agricultural innovations: Prototype Development and Technology Grants. A huge array of equipment can be useful in conducting business in rural living and agricultural economies. Prototype Grants are restricted to inventions improving the operations of food processing equipment and agricultural equipment. Technology Grants are to encourage innovation, and APUC will maintain a broad view of technology, such as hardware, software, devices or processes. Biotechnology will be considered as long as those advances improve agricultural product utilization as food, feeds, fuels and fiber. Grants are listed in order of distribution.

Packet Digital

Joel Jorgenson, Fargo

Grant Amount: \$ 26,863.00 Total Budget: \$ 145,957.00

Packet Digital is developing new electronics technology and hardware that will increase efficiency in farm management, particularly during harvest. The company has teamed with key individuals at American Crystal Sugar to create a system tailored for the harvest of sugar beets. The technical performance met or exceeded expectations. Customer acceptance has met or exceeded expectations. Packet Digital will expand its offering to other agricultural markets and industrial partners.

Gardendwellers Farms

Holly Mawby, Churchs Ferry

Grant Amount: \$ 9,000.00 Total Budget: \$ 23,840.00

This project uses steam distillation of eight herbs grown in temperature and soil conditions most frequently found in northeastern North Dakota. Distillation removes hydrosol and essential oil from chives, lemon basil, spearmint and basil. Hydrosol is a product that utilizes the oils in cosmetics and health and beauty products. The hydrosols collected from this project were sold to a North Dakota company at a profit.

Brookins Hybrid Drive System

Ernie & Gail Brookins, West Fargo

Grant Amount: \$ 26,100.00 Total Budget: \$125,540.00

This is a hybrid air/hydraulic drive system that allows the recapture of up to 80 percent of the vehicle's wasted energy. This design can be used in farm/grain trucks, tractors, combines, over-the-road trucks, etc. It can be installed in existing vehicles.

Packet Digital

Joel Jorgenson, Fargo

Grant Amount: \$ 25,000.00 Total Budget: \$264,700.00

The company is developing a new animal ear tag that combines radio frequency identification technologies with biomedical measurements. The ear tags provide producers a new means to determine the health of the herd and optimize the energy expenditure to improve the feeding efficiency and reduce costs and waste.

WISEnterprise

Gavin Skarphol, Tioga

Grant Amount: \$ 8,400.00 Total Budget: \$34,000.00

The grant will be used for the prototype development of the Waterspike, an automatic water conserving root feeding system that not only saves the consumer water, money and energy but also helps promote plant growth.

Brookins Hybrid Drive System

Ernie & Gail Brookins, West Fargo

Grant Amount: \$ 26,000.00 Total Grant: \$223,200.00

This project is Phase II of a prototype development of a hybrid air/hydraulic drive system that allows the recapture of up to 80 percent of the vehicle's wasted energy. This design can be used in farm/grain trucks, tractors, combines, overthe-road trucks, etc. This is the only hybrid design on record that can make an immediate impact on the fuel crisis.

TECHNICAL ASSISTANCE GRANT



A Technical Assistance Grant is designed to maintain and expand North Dakota's existing value-added businesses. The grant is intended to help these businesses become more competitive, productive and profitable. An eligible candidate for this grant is an existing company located, operated and registered in North Dakota that adds value to agricultural products, including food manufacturers and beverage manufacturers.

North American Bison Cooperative

Mary Gonsior, New Rockford

Grant Amount: \$26,000.00 Total Budget: \$63,213.00

Plans are to increase its production to process 50,000 head of bison and beef annually with the next 5 years. Professional consultants will be hired to determine the actual infrastructure needs to meet this goal.

SPONSORSHIPS



Sponsorships are listed in order of distribution.

Marketplace for Entrepreneurs 2008

Marilyn Kipp

\$15,000.00 Sponsorship

Marketplace was held in Grand Forks at the Alerus Center. Its mission is to stimulate, encourage and assist North Dakotans of all ages and walks of life to envision and investigate ideas for supplementing income and creating new enterprises. It assists North Dakota's farmers and ranchers to become the trusted providers of the highest quality food in the world, add value to our products and diversify the uses of our land as the most promising way to raise net farm income, create employment and assure community growth.

2007 Ag Open

Tom Rolfstad, Williston Area Development

\$5,000.00 Sponsorship

The Ag Open is the region's key marketing tool in the implementation of a value-added agriculture strategy. The event focuses on attracting value-added processors and related companies to the Mon-Dak region.

North Dakota Future Farmers of America

\$500.00 Sponsorship

APUC has been a 20-year sponsor of the FFA Proficiency Award for Value-Added Food Processing.

2008 Ag Open

Tom Rolfstad, Williston Area Development

\$5,000.00 Sponsorhip

The event was held Aug. 5-7, 2008. Key research extension center specialists and county agents were available for questions. Information on high-value crops currently grown and developed in the area was provided.

Marketplace for Entrepreneurs 2009

Marilyn Kipp

\$15,000.00 Sponsorship

Marketplace 2009 will be held in Bismarck at the Civic Center, Jan. 13-14, 2009. Marketplace seeks to empower individuals and communities to pursue their individual economic development visions by providing new ideas, opportunities and encouragement. The ideas, resources and information gained at Marketplace are used throughout the year and beyond.

FUNDING SOURCES



APUC's appropriation for the 2007-2009 biennium totaled \$3,935,862 and was provided from the following sources:

- Up to \$575,000 was authorized to be collected from the Agricultural Fuel Tax Fund. The fund is created by a \$.02 "check-off" of farmers' off-road gas tax refunds.
- Up to \$500,000 may be collected in federal grants. APUC secured \$55,578 through the Rural Business Enterprise Grant from the USDA Rural Development Administration during the biennium.
- \$1,662,115 is appropriated directly from the state general fund. \$200,000 of these funds must be used for grape-related projects.
- \$271,078 was authorized as carryover authority from the previous biennium. At the beginning of the biennium, an additional \$927,669 was also authorized as carryover authority from the previous biennium.

Financial Information 2007-2009

Appropriation Sources

General Funds	1,662,115
Gas Tax Refund	575,000
Federal Funds	500,000
Carryover Authority	<u>1,198,747</u>
Total Appropriation	\$3.935.862

As of September 30, 2008

	Expenditures	<u>Budgeted</u>	
Salaries & Benefits	\$ 157,979	\$ 254,035	
Operating Expenses	40,502	92,113	
Grant Commitments *	1,652,712	3,589,714	
Total Expenditures	<u>\$1,851,193</u>	\$3,935,862	
Remaining Appropriation	\$2,08	<u>\$2,084,669</u>	

^{*} Includes carryover commitments

NORTH DAKOTA AGRICULTURAL PRODUCTS UTILIZATION COMMISSION

Supporting the
Dawn of a New Age
in Agriculture



Agricultural Products Utilization Commission

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